

THERE'S LOTS OF ROOM ON THIS OLD EARTH

A Resurrection Mass Meeting Using the Most Liberal Figures Could Not Crowd Its Surface and the Inhabitants of 6,000 Years Could Be Housed in Texas.

Suppose there were to go a general resurrection of the dead—that all the human beings who have ever lived were simultaneously to be re-endowed with life, what then? Could they be housed? Could they even find standing room on this earth? Or would it be necessary to use the surface of the moon as an annex?

The answers to these questions, worked out from the best obtainable data, regarding the area of the earth and its population at this time and in the past, are rather surprising. They show that this is a pretty big old earth after all. They show, too, that if the earth's land area were all utilized as perfectly as the fertile area of poor Egypt is now utilized, all the human beings that could have existed within the last 6,000

face of the earth, as at present constituted, there would be only 546 to the mile. This population, while it would be close would not be unapproached by any means, since England, with its area of 50,540 square miles, and its population of 27,483,490, supports 546 to the square mile, and Belgium, with its population of 6,195,355 on an area of 11,373 miles, supports 544 to each.

For the purpose of present computation as to the world's population before Christ, the Biblical age of the earth only, about 6,000 years, has been considered, and the number of generations B. C. included (135), has been decided upon arbitrarily. On this assumption, the human race began 4,375 B. C., and the total population of the earth before the death of Augustus, figured

were scattered over this area, there would be only 1,265 to each square mile.

This is less than three times as many as are supported on the surface of England and considerably below the supporting power of Egypt, as exemplified by conditions actually existing at this time. It is true that the area of Egypt is given as 68,000 square miles, while the population is only 4,817,285. But the fertile territory in Egypt amounts to only 5,500 square miles, so that the population there supported is really 1,250 to each square mile, and it is not likely that the limit has ever yet been reached. It is true that the soil of Egypt is unusually productive, largely because of the regular irrigation furnished by the annual overflow of the Nile. But it is also true that agriculture is extremely primitive there and

in much greater quantities than now, and the art of fishing will, no doubt, be brought to its greatest perfection then. DESERTS MUST BE MADE TO BLOOM.

In order to make all the land surface on the earth outside the polar regions capable of supporting life, man must learn how to utilize the deserts, and scientists there are in plenty who predict that this will certainly be done. Even now, Sahara, the greatest of deserts, supports two and a half millions people on its three and a half million square miles of area. Some of these who dwell there get their food from other places, but most of them live on the products of the desert itself, growing crops of various kinds upon the fertile oases with which its surface is dotted. Now, the soil of these oases differ only from that of the surrounding territory in being supplied with moisture. Wherever a spring gushes out amid the sand and rocks, there the soil of Sahara blooms like the rose. And the means of irrigating almost the whole of this vast region are quite within the reach of science. For underneath the desolate surface of the waste and below a layer of about 200 feet of sand, there is a layer of permeable sand, through which flow constantly living streams of water from the mountains to the north. The existence of these streams was known in very ancient times. Olympiodorus is quoted by Ptolemy, in a statement that wherever an excavation of from 10 to 200 feet was made in Sahara, there water gushed out in strong and copious fountains. Some thirty or forty years ago, too, certain French engineers made many borings for water in Sahara and, in almost every instance, succeeded in finding it.

If the desert can be reclaimed so as to support life, it will be easy to make the steppes inhabitable, for they are not necessarily dry and sterile; they are simply elevated, treeless regions which have not yet been settled, and are almost identical with the western prairies of the United States. Not all the prairie land of this country has been found to be irritable to be sure, but modern man has only yet begun to show what he can do in this line when he sets about it, and many places now considered desert were irrigated by the ancients.

In such an era of combined scientific achievement and human demand, the burden of time will not only be necessary but will be forbidden. Already the horse has begun to disappear before the electric motor, the motorcycle and the bicycle, and he will be a rich man indeed who can afford the luxury of an animal to transport him from place to place. At the present time the consumption of food products by the millions of horses and other domestic animals is simply enormous. In crowded Egypt even, much of the soil's product goes to feed domestic beasts, but these, and all the wild animals, too, will have to go when there are fifty-six billion human animals to be fed.

A RESURRECTION MASS MEETING. If all the people who could have lived upon the earth within the Biblical era could be supported on the surface, it is manifest that they could all stand on a comparatively small surface. As a matter of fact, allowing a square yard for each person to stand upon, a resurrection meeting would occupy only 18,674 square miles, or less than half the area of the state of Indiana, which contains 36,350 square miles. This great number of people would weigh enormously and it might be that their massing in one place would make the old earth wobble in its revolution.

To house all these people would require a larger area, but Texas, roofed over, would be quite big enough on the ground floor. This great state has an area of 267,790 square miles, and this is territory enough to allow more than fourteen square yards for every person. Walls counted in, each person could have a room ten by ten feet in size, and the population would be only 201,655 to the square mile, or no denser than that of the most crowded square mile of New York city, and nothing like so dense as the block on the "East Side" that is bounded by Avenue A, Fourth street, First avenue, and Fifth street. This block is 285 feet wide by 625 feet long, and houses 8,190 individuals. If they were all to stand on the ground of that block at one time, they would have only 21 square feet of room apiece and they could easily clasp hands.

If you doubt the statement that fifty-six billion persons could be housed in Texas you can figure it out for yourself, remembering that there are 3,067,600 square yards to the square mile, or nearly 824,000,000,000 of square yards in the entire state. The surface of Texas, in fact, is large enough to afford standing room for almost fifteen times as many people as have lived within the last 6,000 years.

Why, the entire population of the United States in 1890, numbering somewhat under 63,000,000, could stand on Manhattan island, which has an area of 68,000,000 of square yards and the entire population of the earth at the present time could find standing room on 80 square miles, or a little more than one-third of the area of Rhode Island, which is 1,250 square miles. FROM A SCIENTIFIC STANDPOINT.

But it is showing no disrespect to the Bible to assume that man has been on earth more than 6,000 years, though the most cocksure scientist cannot prove how much more and hardly any two of them agree on this point. They figure that man has lived from 20,000 to 100,000 years and if they are right then the figures given in this article are, of course, all wrong and much too small. One scientist declares that at least 2,250,000,000 human beings have lived and died. This number is altogether too great for comprehension, and yet that many persons could find standing room on a small fragment of the earth's land surface. If each occupied one square yard they could all stand on 726,358 square miles and this territory would be furnished by Texas, 285,790, California 128,290, Nevada 110,790, New Mexico 122,580, Arizona 113,020—total 779,440, or about 44,000 square miles to spare.

There is some room left on the earth after all. Oshorn Spencer.

SHOWERS OF INSECTS. John Splawn, who resides in the Hog Heaven section of Killeck county, is authority for the statement that there recently occurred in that neighborhood a peculiar shower of black bugs, says the Yakima Herald. He at first noticed that the atmosphere was filled with what appeared to be a dark fog. Shortly afterwards the ground became covered with myriads of creeping insects about the size of ordinary grains of powder, and in places they were piled up to the depth of two inches. He could scrape them up by the handful, and they appeared to be lively little fellows, resembling a louse in form, though they were jet black in color. What the insects were or where they came from is a mystery, but the same section has been previously visited by showers of toads and beetles.

THE CLERK PAID IT. During Andrew Jackson's presidency a certain clerk in the treasury department showed a marked disinclination to paying his board bill. He had signed notes, but his landlady could collect no money. In despair, she went to the white house to see Jackson. She told her story and he requested her to get the clerk's note for the account. She obeyed and carried the note to Andrew Jackson, who, after glancing over it, affixed his signature to the back. "Now, monsigner," said he, "put that in the bank and we shall see which of us shall have to pay you the money." The note was duly deposited and was paid by the clerk, who afterwards apologized to Jackson and promised to mend his ways.

ONLY 'BUG BIBLE'

But Four Copies of Which Are Known to Exist.

WHAT "BUGCES" REALLY ARE

Fac-Simile of Title Page and Page Showing the Famous "Bug" Passages.

Precinct in interest among the freaks of early printing—so fascinating to the enthusiastic collector of old books, is the curious volume known as the "Bug Bible." There are only four known editions of the "Bug Bible" in existence, three being owned by the great English libraries at Lambeth, at Oxford, and in the British Museum, at London, respectively. The only copy in this country is now in the possession of James Vincent of Tabor, Iowa.

This book is undoubtedly one of the original copies of the famous translation of William Tindale and Miles Coverdale. Its title page bears the date, "M.D.XL.IX." (1549), and it is evidently one of the few copies struck off by the Dutch printer Van Meterin. It is known as a Coverdale edition, and was printed in Antwerp.

This translation of the Bible cost the unfortunate Tindale his life. His arrest having been procured by an emissary of Henry VIII, he was strangled and his body burned at the stake, since the Bible was then a forbidden book. Coverdale's translation was destroyed wherever found, and John Rogers, who was concerned in the same work, was the first martyr in the unhappy reign of Mary, the daughter of Henry VIII, and his Spanish wife, Catharine of Aragon.

The "Bug Bible" gets its name from its extraordinary rendering of the fifth verse in the 1st Psalm, which reads, in this edition: "So that thou shalt not need to be afraid for any 'bugges' by night nor for the arrow which flyeth by daye." In all other versions the verse reads "terrors" in place of "bugges."

Nevertheless, the use of the word "bugges" in this connection, considering the state of the English language at the time the translation was made, was perfectly proper, and not at all irreverent as it now seems. Indeed, the word "bugle" is still in use, and conveys the same idea of unknown terrors and the homely word "buggers" current in many parts of the United States as a "scare word" to frighten children, is etymologically identical with Tindale's "bugges." The familiar term, "bugaboo," is no doubt a variant from the same root.

At the death of Mr. Vincent's father, in 1848, this Bible was found among his possessions. The elder Vincent had for 43 years been pastor of the Congregational church of Deal, Kent county, England, and there appears to be no record as to how the volume came into his possession. Immediately after his father's death Mr. Vincent came to this country bringing the Bible with him, and it has been in his possession ever since. With the exception of a few pages at the end of the New Testament and the title page of the Old Testament, the book is in perfect condition. There are a number of wood cuts, very finely executed, scattered through the volume, some of them occupying

referring to Abraham as "lords," reads as follows:

"And if she be not obedient and helpful unto hym, he endeavoreth to beate the fear of God into her heade, that shee may be compelled to learne her dutie and do it."

This would hardly recommend itself to the editors of the very modern Woman's Bible, about which there has been so much discussion of late.

The title pages of this unique and almost priceless volume are especially worthy of study. That of the New Testament is reproduced for the reader in reduced fac-simile. A great portion of it is devoted to a border of fine old wood cuts. In the lower left hand corner is an aged monk, cowed and robed, writing in that appears to be a stable, for an ox is lying at his feet. In the opposite corner are figures evidently intended to represent a saint and an eagle.

Running up both edges is antique scroll work, in which views and cherubim are curiously interwoven, while at the top of the page are two cuts, one of an angel appearing to a man seated in a chamber, the other of a monk writing at a desk behind which crouches a winged lion.

In the center of the page is this inscription in very old English type:

THE NEW TESTAMENT OF OUR SAVIOUR JESU CHRISTE, newly and diligently translated into English with innovations in the Merger to help the reader to the understanding of the text. Printed in the year Our Lord God M.D.XL.IX.

This "Bug Bible" belongs to the same class of literary curiosities as the German Bible of 1557, which is known as the "Breeches Bible," owing to the fact that the early translators, for want of a better name for the garments of Adam and Eve, clad the first man and woman in "breeches" (Genesis 3, 7.) the "Wicked Bible," in which the word "not" is omitted from the seventh commandment, and a much later edition known as the "Printers' Bible," in which the psalmist David is made to say that "printers have persecuted me," who in fact "princes" had been guilty of annoying the father of Solomon.

Just what the fate of this rare and valuable book will be is uncertain. It has been offered to at least one of the large libraries of the country, but as there was no available fund for its purchase it was not secured, much as the librarian wanted it. There is no doubt, however, that some library will eventually possess it.

Varying the Monotony of Travel.

From the Chicago Tribune.

"Ah-kit-choo! Kit-choo!" As the woman in the North Side street gave utterance to the foregoing remark in loud and determined accents the car suddenly turned a corner, and a man who was standing near her saved himself with difficulty from falling backward.

A few moments later she repeated the observation even more loudly and spasmodically than before.

"Ah-kit-choo! Kit-choo!" Simultaneously the car turned a corner again, and again the man lurched backward.

"Case of grip, probably," remarked one of the passengers.

"Yes. Too tight on the cable," assented the passenger sitting next to him. Another minute or two passed. "Kit-choo! Kit-choo! Kit-choo!" It was the woman.

At the precise moment she sneezed for the third time the car turned sharply

A RESURRECTION MASS MEETING



SPACE IN WHICH 2,250 MILLIONS MIGHT STAND IS SHOWN BY HEAVY SHADING ON NORTH AMERICA



SHOWING RELATIVE DENSITY OF THE WORLD'S POPULATION OF 1,437,700,000



CAN THE DESERT BE MADE TO BLOSSOM AS THE ROSE?

years or thereabouts—the world's age from the biblical standpoint—could not only find room in abundance, but in all probability could actually be furnished with enough to eat by the cultivation of the soil.

According to the estimate of the Royal Geographical society of London, the land area of the earth amounts to 51,238,800 square miles; while the population is a little less than a billion and a half (to be exact 1,437,900,000) or 29 to the square mile.

It is, of course, impossible to make accurate statements regarding the earth's population in the past, but with the best existing data and the known facts of the present for a basis, sufficiently satisfactory general calculations may be made.

At the time of the death of the Roman emperor, Augustus, 14 A. D., old Bodio, quoted by Mulhall, the world's most accomplished population sharp, says there were only 54,000,000 human beings in existence, rather less than one-twenty-seventh of the present population.

In 1690, not long after the Pilgrim fathers and mothers landed on Plymouth rock, according to Riccoli, also quoted by Mulhall, the population had increased to about an even billion. Accepting this as correct, the increase from 1690 to 1891, was 467,900,000, or about 48 and 4/10 per cent. every 201 years. Now, if so happens, as life goes now, that a generation (that is the average length of human life) is about 33 years, and 231 years is, therefore, exactly seven generations, the figuring out the earth's total population for the last 6,000 years is a comparatively simple matter. That the figures given by Bodio and Riccoli are probably very nearly correct is shown by the fact that taking 54,000,000 for a basis and allowing for an increase of .4879 per cent. every 231 years, the population in 1891 (after the lapse of 57 generations) would be 1,368,950,513, a number that is surprisingly close to the Royal Geographical society's estimate for 1891.

TWENTY-EIGHT BILLIONS SINCE CHRIST.

In continuing his calculations from the basis adopted, the writer used the method that would be employed in working out a problem in compound interest, adding certain percentages to the total to allow for the undoubtedly shorter average term of human life at the beginning of the Christian era, due to the greater mortality then than now, from wars, pestilence, limited sanitary knowledge, etc. The details of the figuring would, of course, be too tedious to be set out here, but the general result is interesting. Including the fifty-four millions who were living at the time of the death of Augustus and those now in the flesh, not quite twenty-eight billions of human beings have lived since the beginning of the Christian era. If all these people were alive now, and were evenly scattered over the land sur-

out in the same manner as was the population since that time, would be 775,238,893, or only about 1-35 of the aggregate population of the Christian era. On this basis the total population of the earth during the Biblical era could have been no more than about twenty-eight and three-quarter billions, and this multitude of persons could be supported by crowding the earth's land surface only a little more than England's population is crowded, since there would be only 562 people to the square mile.

FIFTY-SIX BILLIONS AN OUTSIDE FIGURE.

But one does not like to consider this computation correct, and undoubtedly it is far too small. Before the Christian era, the mortality must have been much greater than since that time. As a matter of fact, only a small proportion of the earth's surface was subdued, and the settled areas were only little patches, so to speak, surrounded by howling wilderness, which were filled with wild beasts and all sorts of dangers to human life. A large proportion of the people, indeed, lived in the wilderness itself, where they were subject to repeated decimation from exposure, from insufficient food and from their fellow denizens of the forest, the beasts. Besides, in those days men were constantly fighting one another and the death rate from wars alone was sometimes so large for long periods that the population must have stood still or even grown smaller. Undoubtedly the per cent. of increase by birth was larger than now, but so, also, was the decrease from all the causes enumerated. Men were such thorough fighters then that it was not unusual for all but a very few of the losing side in a war to be literally exterminated.

It is impossible, therefore, to make any estimate of the population before the death of Augustus, other than an arbitrary guess. But it would seem to be liberal to assume that as many lived before that monarch as have lived since, and on that basis the total population of the earth since man's advent upon its surface would be a little less than fifty-six billions. Now, it would be easy to the imaginative mind in which is lodged a supreme faith in the future of science, to see how all these people could be supported upon the surface of the earth.

OLD EARTH COULD SUPPORT ALL. The total area of the earth, as has been before stated, not including the surface of the oceans, is rather more than fifty-one millions of square miles. Certain parts, however, notably the polar regions, are entirely unfit to support the life of any great number of human beings. But, leaving the polar regions out altogether, nearly all the remainder of the earth's surface might be made to support human kind. Of strictly fertile regions there are 28,269,200 square miles; of steppe 13,900,000; of deserts 4,180,000; total, exclusive of polar regions, 46,350,200. Now, if the entire population of the earth during the last 6,000 years, as figured above,

that much larger crops than actually are raised could be produced by the application of scientific methods.

Undoubtedly the soil of Egypt is naturally much more productive than a large portion of the earth's surface included in the territory classed as fertile by the statisticians. But who can say, in view of the wonderful advances made by science within the last hundred years, that man will not ultimately find out, by economy of territory, by the perfection of artificial fertilization and by the ultra refinement of cultivation, how to make every square mile of territory on the earth's land surface support as many human beings as every square-mile of Egypt now supports?

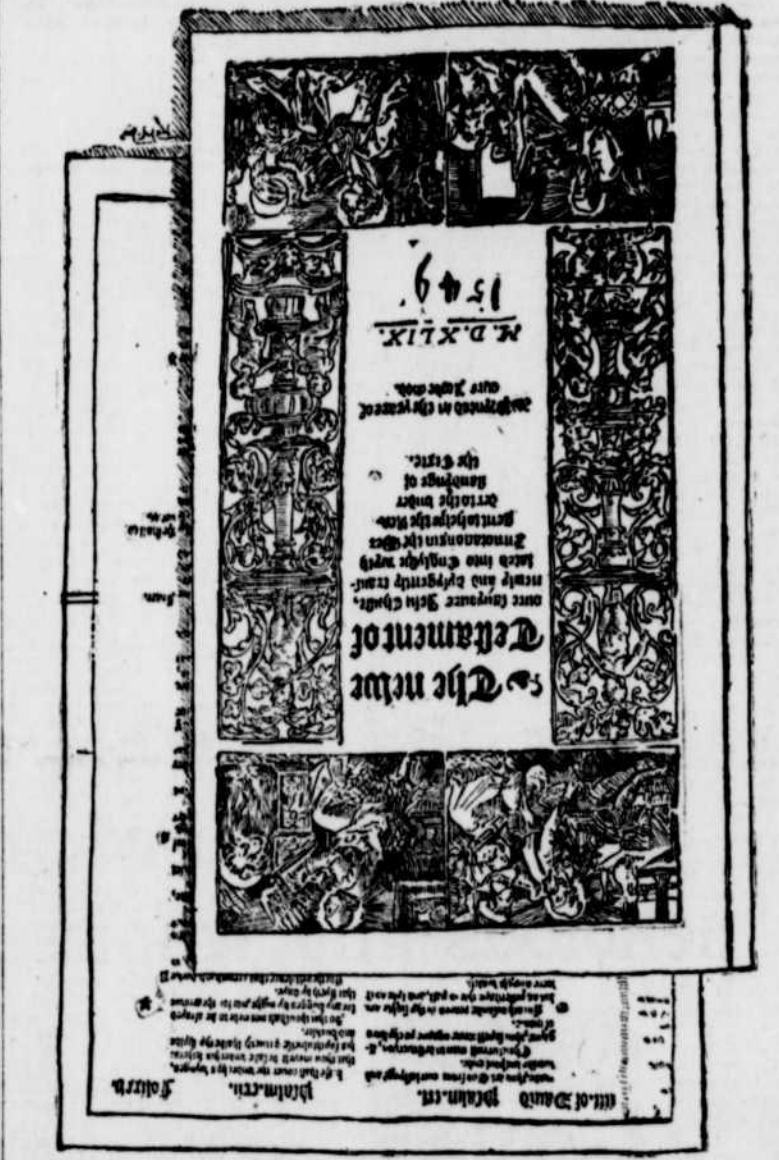
If this be a possibility, and I shall try, a little further on, to demonstrate that it is, there is no immediate prospect of the overcrowding of the earth, despite the gloomy predictions of certain pessimistic scientists. Still the time must come, unless the world's population shall be brought to a standstill, when its surface will be as crowded as it would be in the event of the literal resurrection of all the dead.

One would need to be gifted with the power of prophecy to say when that time will come, but at the present rate of increase, it will not be far from A. D. 4000, since the earth's population now increases a little more than ten fold every forty-two generations, or about 1,286 years. At this rate, there will be fifteen billions of people on earth in the year 325, and the fifty-six billion mark will be reached in about 2,100 years from now.

HOW CAN IT BE DONE?

In the event of such a terrific crowding as is here contemplated, a man will have to test his ingenuity to the utmost, since even in the territories classed as fertile there are tracts upon which nothing can be raised, and other tracts that must be given up to cities. Much land is used, too, by the railroads, and by common highways and in other unproductive ways. But in Egypt, at the present time, the roads use up much territory; the cities occupy much and there is, also, much waste land that is allowed to go to waste altogether. It may be that when the time comes men will build all their cities on the heights and other sterile places, reserving the fertile plains and valleys for cultivation. They may, also, reclaim for agriculture the use the land now used by railroads and highways. Unless all signs fail, this will not be so difficult as might appear, for already the practical flying machine is thought to be in sight and dire necessity, the proverbial mother of invention, will have forced the airship's perfection long before A. D. 4000. Man may have learned before that time, also, to manufacture food direct from the elements by chemical combination, and that will simplify matters immensely. It may, in fact, double the life-supporting capacity of the earth.

In those remote days, too, the sea will be called upon to yield its food for man



REDUCED FAC-SIMILE OF PAGE FROM THE ONLY "BUG BIBLE" IN THE U. S. THE STAR ON THE MARGIN INDICATES THE POSITION OF THE CURIOUS PASSAGE ON ACCOUNT OF WHICH THIS RARE AND VALUABLE BOOK HAS RECEIVED ITS NAME.

an entire page, while others cover only half a page. Many of the books in both the Old and the New Testament have small illustrations at the beginning, and at the beginning of each chapter is a large capital letter in the center of a square wood cut.

When King James authorized that translation of the Bible which was completed in 1611 and is still in general use, the learned scholars selected for this responsible task took Tindale's translation as a basis, making changes only to correct errors and to conform to the spelling and grammar then in vogue. This fact explains the strikingly archaic phraseology so noticeable in King James' version—a peculiarity which few would care to see eliminated, for the style is in the main admirably suited to the sublimity, forcefulness, and simplicity of the sacred text. In this "Bug Bible" there is another peculiarity. A passage which occurs in the original editor's comment on the third large capital letter in the center of the first Epistle of Peter, wherein Sara is spoken of as

again and the man who was standing up lost his balance entirely and fell to the floor.

"Madame," he said in an injured tone, picking himself up and moving further away from her, "you ought to take something for that!"

Cure Consumption

TO THE READERS OF THIS PAPER—I have an absolute remedy for Consumption and all Throat, Chest, and Lung Troubles. By its timely use thousands of hopeless cases have been PERMANENTLY CURED. So proof-positive am I of its power, that to increase its usefulness and make known its great merits, I propose to send TWO BOTTLES FREE to those readers who have Consumption; any Bronchitis or Lung Trouble; Loss of Flesh, and all Conditions of Wasting; if they will write their names and address to the address. Sincerely, T. A. SLOCUM, M.D., 183 Pearl Street, New York.